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| 10/633,137 | 08/01/2003 | Mohammad Athar Shah | 199-0201US | 3128 |

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| EXAMINER |
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RAO, ANAND SHASHIKANT

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| ART UNIT | PAPER NUMBER |
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2621

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12/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/633,137

Applicant(s)

SHAH ET AL.

Examiner

Andy S. Rao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-4, 6, 9-24, 26, 29-34, 36, 39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9-24, 26, 29-34, 36, 39-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Request For Reconsideration

1. Applicants arguments with respect to claim(s) 1-4, 6, 9-24, 26, 29-34, 36, 39-40 as filed on 8/14/08 have been fully considered and are persuasive.
2. Claims 1-4, 6, 9-20, 31-34, 36, and 39-40 remain rejected under 35 U.S.C. 103(a) as being anticipated by Gonzales et al., (hereinafter referred to as “Gonzales”) in view of Chiu et al., (hereinafter referred to as “Chiu”), as was set forth in the Office Action of 4/14/08.
3. The Applicants present five arguments contending the Examiner’s rejection of claims 1-4, 6, 9-20, 31-34, 36, and 39-40 under 35 U.S.C. 103(a) as being anticipated by Gonzales et al., (hereinafter referred to as “Gonzales”) in view of Chiu et al., (hereinafter referred to as “Chiu”), as was set forth in the Office Action of 4/14/08. However, after a careful consideration of the arguments and further scrutiny of the applied references, the Examiner must respectfully disagree and maintain the grounds of rejection for the reasons that follow.

After establishing the legal basis of the bulk of the Applicant’s arguments (Request for Reconsideration 8/14/08: page 2, lines 17-22; page 3, lines 17-19), summarizing the salient features of the claim (Request for Reconsideration of 8/14/08: page 3, lines 1-16), and reproducing the Examiner's rejection of the claim (Request for Reconsideration of 8/14/08: page 3, lines 20-24; page 14, lines 1-17), the Applicant argues that the reference fails to teach or suggest “...a method...for adjusting a coding method threshold for encoding a block in an image, wherein the coding threshold determines whether the block should be coded...” and bases this argument upon a presentation of the pertinent citation of the primary reference (Request for Reconsideration of 8/14/08: page 5, lines 1-19) and Applicant's accompanying explanation of the

citation (Request for Reconsideration of 8/14/08: page 5, lines 20-26). The Examiner respectfully disagrees. It is noted that the allocation is threshold based (i.e. the determining of the allocations of each picture type prior...), and the Examiner further Gonzales discloses performing re-allocations based on whether VBV buffer limits are in danger of being violated (Gonzales: column 13, lines 50-67; column 14, lines 1-10). That is in performing a re-allocation, this requires a readjustment the acceptable thresholds, and thus reads upon the method of the instant invention. The Examiner further notes that that the specific citation of the claim was relied upon to show that the Gonzales teaching was directed towards a claimed "...method..." as in the claim 1. This isn't explicitly evident from the apparatus centric discussion of the Gonzales teaching. Accordingly, the Examiner maintains that the limitation remains met.

Secondly, the Applicants argue that the Gonzales-Chiu combination fails to address "...encoding at a first time, a first image representation of the block..." and "...encoding a second time later than the first time, a second image representation of the block..." as in the claim (Request for Reconsideration of 8/14/08: page 5, lines 27-29), and further bases this argument upon a presentation of the applied sections of the primary reference (Request for Reconsideration of 8/14/08: page 5, lines 29-31; page 16, lines 1-32) and Applicant's accompanying explanation of both passages (Request for Reconsideration of 8/14/08: page 6, lines 33-36; page 7, lines 1-7). The Examiner respectfully disagrees. It is noted that QP adaptive pre-processor sets up the quantization of input image sequences according to previously coded pictures which have been communicated to the subsystem. In the normal mode of coding, those previous pictures will only be previous pictures of the same frame type earlier in the GOP sequence. But, when VBV limits are at levels that trigger re-allocation, on the second pass of

coding due to re-allocation, that previous frame will actually be the same frame of the first pass coding result which is supported by the citation of the second passage. Accordingly, the Examiner maintains that the limitation remains met.

Additionally, the Applicants argue that rejection fails to address the feature of "...assessing at least and second encoding parameters to determine whether the image is likely stationary, wherein the first and second encoding parameters are quantization parameters..." (Request for Reconsideration of 8/14/08: page 7, lines 8-11) bolstering this argument with the legal conclusion that the Examiner has resorted to "...impermissibly splitting..." the limitation into two pieces and fails to consider the limitation as a whole (Request for Reconsideration of 8/14/08: page 7, lines 11-13), the legal conclusion being augmented with the Applicant's reproduction of the applied passages (Request for Reconsideration of 8/14/08: page 7, lines 14-34; page 8, 11-14; page 9, lines 1-27) and Applicant's understanding of both applied citations (Request for Reconsideration of 8/14/08: page 8, lines 1-10; page 9, lines 28-34). The Examiner respectfully disagrees. The Applicants seem to be of the opinion that the motion analysis which is directed towards classification/mode selection as disclosed in Gonzales determines the quantization parameters and fails to teach the limitation and thus is contrary to the understandings and expectations of the art, the combination would not have been obvious to those skilled in the art, Schenck v. Nortron Corp., 713 F.2d 782, 218 USPQ 698 (Fed Cir. 1983). The Examiner would respectfully disagree, noting that the motion analysis (Gonzales: column 17, lines 45-55: determining whether an image is "stationary") also pertains to the coding difficulty factors D_I , D_P , D_B which is the **result of the assessment** (Gonzales: column 17, lines 10-20), while also looking at the quantization parameters (Gonzales: column 18, lines 65-68: note the

two QP variables in the equation). The remarks concerning the second passage are not shown to elucidate the presence first and second quantization parameters, but rather to show that "...the stationary image processing..." is present as in the claims. Accordingly, based on the above discussion, the Examiner would argue that the limitation has not been impermissibly split as argued by the Applicant and the combination is proper and addresses the limitation.

4. Furthermore, the Applicants argue that the rejection remains defective because the Gonzales-Chiu combination fails to teach "...if the image is stationary, adjusting the coding threshold in the encoder for at least a portion of the block..." limitation (Request for Reconsideration of 8/14/08: page 10, lines 1-8) and produces the applied section of the primary reference (Request for Reconsideration of 8/14/08: page 10, lines 8-23) along with a commensurate explanation (Request for Reconsideration of 8/14/08: page 10, lines 8-23) in support of this argument. The Examiner respectfully disagrees. Again, the Examiner notes that the various QPs are updated, which based upon the discussion above leads to the updating of the attendant difficulty factors. This section was shown to point out that the fact that since the QPs are being updated in order to perform rate control and reduce the likelihood of VBV limit violations (Gonzales: column 20, lines 60-68; column 21, lines 1-5). Turning the Applicant's remarks concerning Chiu, the Applicants again dutifully produce the applied sections of the secondary reference (Request for Reconsideration of 8/14/08: page 11, lines 1-27) and an accompanying explanation of what the Applicants believe is sufficiently contained in the secondary reference (Request for Reconsideration of 8/14/08: page 11, lines 28-32), and argue that while Chiu discloses skipping coding of twice coded blocks, if the blocks are determined to stationary after the second encoding (Request for Reconsideration of 8/14/08: page 11, lines 33-

39). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In particular, since the Examiner has already shown that Gonzales discloses the feature of twice encoding a block above, all Chiu has to do is show conditionally stationary image block processing which it does, and doesn't have redundantly address this feature as well, but meets the "twice encoding" limitation with its combination with the primary reference.

Lastly, in response to applicant's argument that the rationale of the Gonzales-Chiu combination differs from the purported rationale of adjusting a coding threshold for "aesthetic reasons..." (Request for Reconsideration 8/14/08: page 12, lines 1-14), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
/Andy S. Rao/
Primary Examiner, Art Unit 2621

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November 24, 2008